

ELECTRONIC TUBE REFERENCE

ELL80

Power - Pentode (NOT beam) electronic tube

CONSOLIDATED TECHNICAL DATA
2 SECTIONS
CONSTRUCTION
PENTODE-PENTODE

Twin audio power pentode containing two matched output sections for stereo, two-channel, or push-pull amplifier circuits. It integrates two independent power-output pentodes in one envelope.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 550 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	50000 Ω
TRANSCONDUCTANCE	0.006 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	12 W
MAXIMUM SCREEN DISSIPATION	1.25 W
MAXIMUM CATHODE CURRENT	40 mA
Representative section for repeated identical sections.	

SECTION2 Pentode	
PLATE RESISTANCE	50000 Ω
TRANSCONDUCTANCE	0.006 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	12 W
MAXIMUM SCREEN DISSIPATION	1.25 W
MAXIMUM CATHODE CURRENT	40 mA
<i>Second identical physical output-pentode section; added to align physical rows with SectionCount.</i>	

Twin audio power pentode containing two matched output sections for stereo, two-channel, or push-pull amplifier circuits.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1959 Telefunken

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1959 TELEFUNKEN

Section 1 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	EachSection
Screen-grid voltage	250 V	EachSection
Control-grid voltage	-9 V	EachSection
Plate current	24 mA	EachSection
Screen-grid current	4.5 mA	EachSection
Transconductance	6000 μ S	EachSection
Plate resistance	50000 Ohm	EachSection

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Load resistance	10000 Ohm	ClassA;EachSection
Output power	3 W	ClassA;EachSection
Output power	8.5 W	ClassAB;PushPull;TwoSections
Output power	9.2 W	ClassB;PushPull;TwoSections

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	7 pF	EachSection
Output capacitance	4.5 pF	EachSection
Grid-to-plate capacitance maximum	0.2 pF	EachSection

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes,
and their source documents.

